

Appointment

From: Jones, Ricardo [Jones.Ricardo@epa.gov]
Sent: 7/16/2019 5:17:29 PM
To: Jones, Ricardo [Jones.Ricardo@epa.gov]; Snyderman, Steven [Snyderman.Steven@epa.gov]; Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Grable, Melissa [Grable.Melissa@epa.gov]
CC: Friedman, Dana [Friedman.Dana@epa.gov]
Subject: Prep for Neonic Discussion
Attachments: Cotton Council-0855.pdf; Plains Cotton Growers-0900.pdf; Comments_on_the_EPA_Benefits_Assessment_of_Neonicotinoid_Restrictions_in_Cotton_-_April_21,_2018.pdf; Preliminary Pollinator Assessment to Support the Registration Review of Imidacloprid.pdf
Location: DCRoomPYS9671/Potomac-Yard-One
Start: 7/17/2019 3:00:00 PM
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Show Time As: Tentative

Required Attendees: Snyderman, Steven; Hathaway, Margaret; Grable, Melissa
Optional Attendees: Friedman, Dana

Here are the notes from Steven with a few bullets on suggestions/input provided by Don Parker of the Cotton Council regarding potential neonicotinoid mitigation:

- **Argument for limited probability of exposure:** Don provided information (a 1986 study on bee cotton pollen avoidance attached) arguing that there was “limited probability of exposure” to honeybees from cotton and that honeybees do not prefer cotton nectar but will feed on extrafloral nectaries. Note: exceedances on extrafloral nectaries of cotton were still the highest if I’m remembering correctly.
 - o In a separate email, but to a similar point, Don provided more recent data implying that the proportion of honeybees utilizing cotton is very small relatively speaking, and that allegedly newer data supports the older 1986 citation, but that most of this work is still in draft form.
 - *“I believe I have shared before the work of Vinson, but I am including here. I can also tell you that some other work is in draft, such as Wahlen et al. who is a graduate student under Dr. Angus Catchot Mississippi State University. The interesting thing about the data is more and more it implies the proportion of honey bees utilizing cotton is very small relatively speaking and it continues to support older data that bees do not like cotton pollen. The unfortunate part of science is that most negative results are difficult to publish and often never published. But there are data in old literature that show the lack of interaction with honey bees and cotton pollen. The data were published because during that time there was an interest in Hybridization of varieties using honey bees. It failed. The cotton industry along with many university scientists are engaged in better quantifying the interaction between cotton and honey bees and will be continuing research efforts to better asses risks and quantify exposure at the field level. - Don”*
- **Carve out for nectariless cotton varieties:** Don provided information (a 2018 breeding and genetics document) proposing there be a potential exception granted for any mitigation for nectariless cotton varieties (which don’t contain extrafloral nectar). EFED weighed in and said there would still be floral nectar (however with Don’s data citing bees not allegedly foraging on the floral nectar, exposure *may* be less likely). BEAD was worried about the precedence this might set for protecting bees.
- **The importance of at-bloom and southern soil applications:** Don provided information regarding our proposed organic matter soil restrictions citing that *“Georgia has serious concerns that in-furrow soil rate reductions would*

be detrimental.” He added that several states are not encouraging applications during mid-bloom, but fear consequences of whitefly and aphid outbreaks. They fear this sets the precedent for restricting applications during bloom which is critical for the cotton industry because of the continual bloom development throughout the season which in his own words legitimately raises the question the probability for exposure.

- This was backed up from our group conference call as well and really repeats the notes you had.

- **Further emphasized of the importance of at-bloom protection, Don provided no suggested crop stage/node restriction:** Don provided a publication on cotton development which highlights his concerns with blooming and square size restriction. He cites stages like “pinhead square” or “after 5 to 8 nodes” is a critical stage for Boll Weevil Eradication because it allows targeting the first weevils into the field before egg laying can occur. Additionally, even later in development, once the square flowers, the boll begins to develop. He states that protecting the staggered age of bolls is critical, but there will be flowers above the bolls for the remainder of the season. During even lagers stages just before cotton lint shows, protection is important to avoid sticky-cotton (caused by aphid and whitefly excretion of honeydew) which is considered a market disaster. A note: he was not clear on how residual neonicotinoid systemicity is still protectant of these stages even if not applied directly during bloom. He did say however that cotton is heavily monitored (normally twice a week) by independent crop consultants which manage each stage of bloom. I would think this would make nuanced crop stage restrictions a bit more plausible but the cotton council does maintain the belief that neonics are critical throughout the life cycle of the crop and did not suggest any plausible crop stage restrictions.

Also attached are also a few public comments on interest on the cotton benefits assessment.

Finally, the gold standard for cotton risk characterization is in the imidacloprid preliminary assessment, which I’m also attaching.